

Title (en)

HIGH FREQUENCY CIRCUIT, HIGH FREQUENCY COMPONENT AND COMMUNICATION DEVICE

Title (de)

HOCHFREQUENZSCHALTUNG, HOCHFREQUENZKOMPONENTE UND KOMMUNIKATIONSEINRICHTUNG

Title (fr)

CIRCUIT HAUTE FRÉQUENCE, COMPOSANT HAUTE FRÉQUENCE ET DISPOSITIF DE COMMUNICATION

Publication

EP 2128996 A4 20140326 (EN)

Application

EP 07850822 A 20071218

Priority

- JP 2007074336 W 20071218
- JP 2006341217 A 20061219
- JP 2006353755 A 20061228
- JP 2007186749 A 20070718

Abstract (en)

[origin: EP2128996A1] An inventive high frequency circuit includes a switch circuit (SPDT1), connected to an antenna terminal (Ant1), using a field-effect transistor for switching between a connection with first to third transmitting terminals (Tx1-1, Tx2-1, Tx3-1) and a connection with first to third receiving terminals (Rx1-1, Rx2-1, Rx3-1); a transmitting-side triplexer (Trip1) for branching a transmitting path connected to the switch circuit into transmitting paths of first to third frequency bands; and a receiving-side triplexer (Trip2) for branching a receiving path connected to the switch circuit into receiving paths of the first to third frequency bands. The switch circuit can be formed as an IC to downsize the circuit. For example, in constructing the high frequency circuit with a laminated module using a ceramic laminated substrate or the like, particularly when the number of triplexers occupying a large space is large, the switch circuit is formed as an IC and mounted on the laminated body, whereby the whole structure can be downsized.

IPC 8 full level

H04B 1/50 (2006.01); **H03H 7/09** (2006.01); **H03H 7/46** (2006.01); **H04B 1/00** (2006.01); **H04B 1/44** (2006.01); **H03H 7/01** (2006.01); **H03H 7/18** (2006.01)

CPC (source: EP US)

H03H 7/09 (2013.01 - EP US); **H03H 7/1708** (2013.01 - EP US); **H03H 7/175** (2013.01 - EP US); **H03H 7/1758** (2013.01 - EP US); **H03H 7/463** (2013.01 - EP US); **H04B 1/0057** (2013.01 - EP US); **H04B 1/44** (2013.01 - EP US); **H04B 1/50** (2013.01 - EP US)

Citation (search report)

- [IY] US 2006145782 A1 20060706 - LIU KAI [US], et al
- [Y] EP 0959567 A1 19991124 - BOSCH GMBH ROBERT [DE]
- [A] CN 1607734 A 20050420 - LG ELECTRONICS CHINA RES & DEV [CN]
- [A] US 2006268811 A1 20061130 - FUKUNAGA TATSUYA [JP]
- [A] US 2006017522 A1 20060126 - BRADLEY PAUL D [US], et al
- [A] US 2004189526 A1 20040930 - FRANK MICHAEL LOUIS [US]
- [A] US 2004132487 A1 20040708 - KEARNS BRIAN [IE]
- See references of WO 2008075691A1

Cited by

GB2542625A; GB2542625B

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

EP 2128996 A1 20091202; **EP 2128996 A4 20140326**; **EP 2128996 B1 20180718**; JP 2011091862 A 20110506; JP 4710977 B2 20110629; JP 5418516 B2 20140219; JP WO2008075691 A1 20100415; US 2010091752 A1 20100415; US 8582547 B2 20131112; WO 2008075691 A1 20080626

DOCDB simple family (application)

EP 07850822 A 20071218; JP 2007074336 W 20071218; JP 2008550157 A 20071218; JP 2011015070 A 20110127; US 52008507 A 20071218